

## Mid-Unit 4 Test Review

Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve each equation by taking square roots.**

1)  $4x^2 = 64$

2)  $(x + 5)^2 = 16$

3)  $-2(x + 3)^2 + 20 = -220$

4)  $\frac{(x + 2)^2}{3} = -9$

5)  $\frac{(x - 4)^2}{3} + 8 = 17$

6)  $2x^2 + 10 = 28$

7)  $6k^2 + 10 = -156$

8)  $10n^2 - 19 = 3581$

**Solve each equation with the quadratic formula.**

9)  $2k^2 - 4k + 2 = 0$

10)  $2n^2 - 3n + 1 = 0$

$$11) 4n^2 + 4n + 4 = 0$$

$$12) 7b^2 - 10b - 1 = 0$$

$$13) 5x^2 - 12 = 0$$

$$14) 2n^2 - n - 71 = 7$$

**Solve each equation by completing the square.**

$$15) p^2 + 14p + 45 = 0$$

$$16) a^2 + 4a - 21 = 0$$

$$17) n^2 - 10n - 72 = 0$$

$$18) 5x^2 - 10x + 42 = 0$$

$$19) 9r^2 + 18r - 11 = 0$$

$$20) a^2 + 16a + 19 = -9$$